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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/648,152	08/25/2000	Stefan Freitag	4079.21US01	5358

27479 7590 02/26/2004

THE LAW OFFICES OF WILLIAM W. COCHRAN, LLC  
3555 STANFORD ROAD  
SUITE 230  
FORT COLLINS, CO 80525

EXAMINER
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ORTIZ RODRIGUEZ, CARLOS R

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 02/26/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/648,152

Applicant(s)

STEFAN FREITAG

Examiner

Carlos Ortiz-Rodriguez

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 13 rejected under 35 U.S.C. 102(b) as being anticipated by Tanigawa et al. U.S Patent No. 5,694,544.

Regarding claim 13, Tanigawa et al. discloses a method of computer aided design of an object comprising: storing data on the shape and/or structure of the object (see col 2 lines 8-13); displaying a representation of the object on a screen(see abstract lines 9-12); modifying the shape and/or structure of the object by means of input commands to a computer associated with the screen(see col 2 lines 55-58) , the input commands being processed to update the data stored accordingly and an image of the modified object being displayed(see col 3 lines 40-49); and automatically recording modifications made to the design and storing information representing the modifications chronologically(see col 7 lines 24-26).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhu et al. U.S. Patent No. 6,654,032 in view of Tanigawa et al. U.S. Patent No. 5,694,544.

Regarding claims 1,2 and 5, Zhu et al. discloses a collaborative computer-aided design (CAD)(see col lines 10-14) system for designing an object by a plurality of designers working on the design simultaneously(see col 1 lines 60-61), comprising: a server comprising: a database for storing data(see col 4 lines 6-8), and a processor for processing input commands for modifying the object and updating the data stored in the database accordingly; and data recordal means for recording the input commands and storing the record in the database with the object data(see col 8 lines 37-46 and col 6 lines 9-12); and a plurality of user terminals(see col 3 lines 54-55), each having a screen and a data input means and being connectable to the server via a network(see col 4 lines 20-27 and fig 2); the user terminals being connected to the server such that a representation of the object can be simultaneously displayed on the screens of all user terminals and that modifications can be made to the object by inputting commands via the data input means, the commands being conveyed via the network and processed via the server processor and recorded by said server data recordal means(see col 3 lines 65-66 and col 8 lines 14-34) .

But Zhu et al. fails to clearly specify details with respect to the shape and structure of the object and inputting the commands chronologically.

However Tanigawa et al. disclose shape and/or structure of the object(see col 2 lines 8-13) and recording the input commands chronologically(see col 7 lines 24-26).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Zhu et al. and combining it with the invention disclosed by Tanigawa et al. The results of this combination would lead to CAD system.

One of ordinary skill in the art would have been motivated to do this modification because it is known in the art that in order to design an object information characteristic of the object must be stored in order to permit other designers to view or edit the design as disclosed by Tanigawa et al.

Regarding claims 3 and 6, Zhu et al. in view of Tanigawa et al. disclose all the limitations of base claims 2 and 5. Zhu et al. further discloses a system wherein said remote terminals are connected to said server via the Internet(see col 4 line 32).

Regarding claims 4 and 7, Zhu et al. in view of Tanigawa et al. disclose all the limitations of base claims 1 and 5. Tanigawa et al. further discloses a system wherein said, record comprises information on the time and nature of the modification(see col 1 lines 65-66) .

Regarding claim 8, Zhu et al. in view of Tanigawa et al. disclose all the limitations of base claims 2. Zhu et al. further discloses a system wherein said record of modifications contains information on the designer making the modification(see col 7 line 27).

Regarding claims 9, Zhu et al. in view of Tanigawa et al. disclose all the limitations of base claims 2. Tanigawa et al. further discloses a system wherein said record of modifications contains information on the reason for the modification(see col 2 lines 65-66).

Regarding claims 10, Zhu et al. in view of Tanigawa et al. disclose all the limitations of base claims 2. Zhu et al. further discloses a system wherein said record of modifications contains information on web sites related to said modification(see col 4 lines 20-23).

5. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhu et al. U.S Patent No. 6,654,032 in view of Tanigawa et al. U.S. Patent No. 5,694,544 and further in view of Thackston U.S. Patent No. 6,295,513.

Regarding claim 11-12, Zhu et al. in view of Tanigawa et al. disclose all the limitations of base claim 2. But, Zhu et al. in view of Tanigawa et al. fail to clearly specify details regarding a format independent of a CAD program.

However, Thackston discloses a system wherein the object is described by data in a format according to a CAD programme and wherein said record is in a format independent of said CAD programme and plurality of adapters allowing data and input commands originating from different CAD programmes to be input to the system and processed by said data processor independent of the CAD programme. (see col 5 lines 20-26).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Zhu et al. and Tanigawa et al. combining it with the invention disclosed by Thackston.

One of ordinary skill in the art would have been motivated to do this modification in order to provide participation to others with software resource that do not support a specific format as suggested by Thackston.

6. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanigawa et al. U.S. Patent No. 5,694,544 in view of Zhu et al. U.S Patent No. 6,654,032.

Regarding claim 14, Tanigawa et al. discloses all the limitations regarding base claim 13.

But, Tanigawa et al. fail to clearly specify a server.

However Zhu et al. discloses a method, further comprising setting up a collaborative session between a plurality of users(see col 3 line 55), wherein all users are connected via a network to a server(see col 4 lines 20-27 and fig 2), said server storing said data and displaying said representation of the object on the screens of the users, simultaneously, wherein the input commands originate from said users and are conveyed to said server which processes said commands, updates said stored data, displays the modified object on the screens of the users and records said modifications(see col 3 lines 65-66 and col 8 lines 14-34).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Tanigawa et al. and combining it with the invention disclosed by Zhu et al.

One of ordinary skill in the art would have been motivated to do this modification in because it is known in the art that remote servers are utilized to share information as suggested by Zhu et al.

Regarding claim 15, Tanigawa et al. in view of Zhu et al. discloses all the limitations of base claim 14. Zhu et al further discloses a method as claimed in claim 14, wherein the object data is uploaded to said server from one of said users(see col 2 lines 23 and 24).

Regarding claim 16, Tanigawa et al. in view of Zhu et al. discloses all the limitations of base claim 14. Zhu et al further discloses a method wherein, at the end of said session, said data describing the modified object, together with the record of modifications made, are downloaded to one of said users(see col 2 line 20).

Regarding claim 17, Tanigawa et al. in view of Zhu et al. discloses all the limitations of base claim 14. Tanigawa et al further discloses a method wherein, at the end of said session, said data describing the modified object, together with the record of modifications made, are saved in a design management file(see col 11 lines 59-61).

Regarding claim 18, Tanigawa et al. in view of Zhu et al. discloses all the limitations of base claim 14. Zhu et al further discloses a method wherein, at the end of said session, said data describing the modified object, together with the record of modifications made, are saved on a floppy or hard disk(see col 8 line 57).



7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanigawa et al. U.S. Patent No. 5,694,544 in view of Zhu et al. U.S Patent No. 6,654,032 and further in view of Thackston U.S. Patent No. 6,295,513.

Regarding claim 19, Tanigawa et al. in view of Zhu et al. disclose all the limitations of base claim 14. But, Tanigawa et al. in view of Zhu et al. fail to clearly specify details regarding converting the format.

However, Thackston discloses a method wherein said object data is converted from data described in a format according to a CAD programme used by one of said users, into a format according to a programme used by said server, and said record of modifications is in a format independent of the user format(see col 5 lines 20-26).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Tanigawa et al. and Zhu et al. and combining it with the invention disclosed by Thackston.

One of ordinary skill in the art would have been motivated to do this modification in order to provide participation to others with software resource that do not support a specific format as suggested by Thackston.

*Citation of Pertinent Prior Art*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to CAD system:

- a. U.S. Pat. No. 5,446,842 to Schaeffer et al., which discloses object-oriented collaboration system.
- b. U.S. Pat. No. 6,230,066 to Sferro et al., which discloses simultaneous manufacturing and product engineering integrated with knowledge networking.
- c. U.S. Pat. No. 6,232,982 to Harding, which discloses an enhanced chronological feature browser for computer aided design.
- d. U.S. Pat. No. 6,397,117 to Burrows et al., which discloses distributed computer aided design system and method.

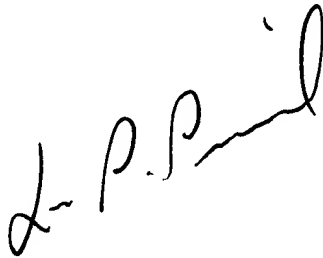
The following publications are cited to further show the state of the art with respect to CAD system:

- e. U.S. Pub. No. 2003/0085921 to GHOSH et al., which discloses network-based design system and methods.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Ortiz-Rodriguez whose telephone number is (703) 305-8009. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (703) 308-0538. The central official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

A handwritten signature in black ink, appearing to read 'C. Ortiz-Rodriguez', written diagonally across the page.

Carlos Ortiz-Rodriguez

Patent Examiner

Art Unit 2125

cror

February 20, 2004

**LEO PICARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100**